

### **REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 7-9, 14-20, 22-31, 33, 34, 37-40, 42-50, 52-55 and 57-60 are in the case. Claims 1-6, 10-13, 21, 32, 35, 36, 41, 51 and 56 are cancelled. Claims 15-20, 22-31, 33, 34, 37-39, 42-48, 50, 52-55 and 57 are withdrawn from consideration. New claims 58-60 are added.

#### **I. CLAIM AMENDMENTS**

Independent claim 14 has been amended to recite a pharmaceutical composition comprising a CD23-binding peptide selected from the group consisting of SEQ ID NOs: 1-10, 31, 32, 34, 35, 40, 43 and 53-61. Claim 14 as amended is supported by the originally filed specification including, for example, page 16, lines 13-16. Support for SEQ ID NOs: 1-10, 31, 32, 34, 35, 40, 43 may be found in original claims 3, 5, 6 and in the sequence listing filed on November 1, 2006. Support for SEQ ID NOs: 53-61 may be found in Tables I and 2, under references of compounds Nos. 436, 437, 490, 489, 491, 411, 492, 410 and 249.

New claim 58 is directed to a pharmaceutical composition comprising at least one amino acid which is D-isomer. Support for this claim can be found, for example, at page 12, lines 5-6.

New claim 59 is related to a CD23-binding peptide comprising the amino acid sequence of any one of SEQ ID NOs: 2 to 10, 31, 32, 34, 35, 40, 43 and 53-61. Support appears, for example, at page 13, lines 9-30 and in Tables I and 2.

New claim 60 is related to a peptide having an amino acid sequence of any of SEQ ID NOs: 1-10, 31, 32, 34, 35, 40, 43 and 53-56 and comprising at least one amino

acid which is a D-isomer, an acylated N-terminus, an acetylated N-terminus or amidated C-terminus. Support appears, for example, at page 6, lines 3-31.

No new matter is entered. Subject matter canceled from the present application has been deleted without prejudice to the possibility of pursuing that subject matter in a separate continuing application.

## **II. CLAIM OBJECTIONS**

Claims 2-9 have been objected to for the reasons stated in paragraph 5 of the Action. In response, claims 1-6 and 10-13 have been canceled without prejudice, and claims 7-9 are now dependent, either directly or indirectly, on composition claim 14.

In response to the other claim objections, claim 38 is withdrawn and claim 51 has been canceled without prejudice. Claim 49 has been amended to correct the spelling error.

## **III. DRAWINGS**

In response to the objection to the drawings, attached is a replacement sheet for Figure 1. Entry of this replacement sheet is respectfully requested.

## **IV. DECLARATION**

A substitute declaration has been requested. The signed declaration will be filed when received by the undersigned.

**V. THE FIRST 35 U.S.C. §112, FIRST PARAGRAPH, REJECTION**

Claims 1-14, 21, 32, 35, 36, 40, 41, 49, 51 and 56 stand rejected under 35 U.S.C. §112, first paragraph, on alleged lack of enablement grounds. The rejection is respectfully traversed.

The Action concedes that the specification provides an enabling disclosure of CD23-binding peptide "selected from the group consisting of SEQ ID NO: 1-10 or the specific peptide listed in Table I and II" (see page 5). In light of this, in order to expedite prosecution, and without conceding to the rejection, the claims have been amended to recite peptide sequences which have been synthesized and/or tested and described in the present application, i.e., SEQ ID NOs 1-10, 31, 32, 34, 35, 40, 43 and 53-61 (Sequence listing and Tables I and II). Withdrawal of the lack of enablement rejection is respectfully requested.

**VI. THE SECOND 35 U.S.C. §112, FIRST PARAGRAPH, REJECTION**

Claims 1-14, 21, 32, 35, 36, 40, 41, 49, 51 and 56 stand rejected under 35 U.S.C. §112, first paragraph, on alleged lack of written description grounds. The rejection is respectfully traversed.

As noted above, in order to expedite prosecution and again without conceding to the rejection, the claims been amended to recite peptide sequences which have been synthesized and/or tested and described in the present application (SEQ ID NOs 1-10, 31, 32, 34, 35, 40, 43 and 53-61 (Sequence listing and Tables I and II)). The specification clearly provides an adequate written description with regard to the

invention as now claimed. Withdrawal of the lack of written description rejection is respectively requested.

## VII. THE ANTICIPATION REJECTION

Claims 1-3, 10-14, 21, 51 and 56 stand rejected under 35 U.S.C. §102(b) as being anticipated by Jouault *et al.*, 2001 (Jouault). The rejection is respectfully traversed.

As now claimed there is provided a pharmaceutical composition comprising at least one CD23-binding peptide, wherein the peptide is selected from those now specifically listed in claim 14. The claimed pharmaceutical compositions as now claimed are not disclosed by Jouault

Jouault describes a peptide FHENWPS (having a sequence of SEQ ID NO: 1) that mimics  $\beta$ -1,2-linked mannoside from phosphopeptidomannane (PPM) of *Candida albicans*. Jouault uses the FHENWPS peptide as a mimotope which is recognized specifically by anti- $\beta$ -1,2-linked mannoside antibodies. Jouault also describes anti-FHENWPS antibodies recognizing the *Saccharomyces cerevisiae* PPM. However, Jouault contains no disclosure regarding pharmacological activity the FHENWPS peptide, and Jouault makes no mention of any capacity of the FHENWPS peptide to bind CD23 molecule. Jouault clearly does not anticipate the invention as now claimed. Withdrawal of the anticipation rejection is accordingly respectfully requested.

### **VIII. THE OBVIOUSNESS REJECTION**

Claims 1, 7, 8 and 9 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Jouault in view of U.S. Patent 5,028,592 or Heck *et al.* 1996 (Heck). The rejection is respectfully traversed.

As noted earlier, Jouault contains no disclosure or suggestion of any pharmacological activity or CD23-binding activity of the FHENWPS peptide. Heck fails to cure this deficiency of Jouault. Heck describes treatment of inflammation by administering to an individual a pharmaceutical composition comprising a tripeptide Lys-Pro-Val, acylated at its amino terminus or amidated at its carboxy terminus. Heck is thus irrelevant to the invention as now claimed, since the tripeptide Lys-Pro-Val is unrelated to the presently claimed invention. The combined disclosures of Jouault and Heck would not have led one of ordinary skill to envisage the binding affinities of the disclosed peptides for CD23 molecule. Claims 1, 7, 8 and 9 are clearly not rendered obvious by the combined disclosures of Jouault and Heck.

Claims 1, 35, 36, 40 and 41 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Jouault in view of Heck *et al.*, 1996. Without conceding to the rejection, it is believed that the rejection has been obviated by the claim amendments presented herewith. As noted above, Jouault fails to disclose or suggest pharmacological activity or CD23-binding activity of the FHENWPS peptide. Heck *et al.*, 1996 fails to cure the deficiencies of Jouault. Heck discloses the use of D-isomers of amino acids to improve the biological activity of certain peptides listed in Table 1, but none of the peptides disclosed in Table 1 of Heck *et al.* 1996, is in any way related to those now recited in the currently pending claims.

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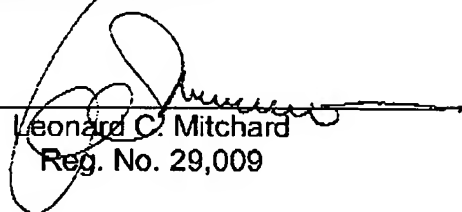
The cited art fails to give rise to a *prima facie* case of obviousness of the invention as now claimed. Withdrawal of the obviousness rejections is respectfully requested.

Favorable action is awaited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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Attachment: Replacement Sheet Figure 1